

ACCIDENT PREVENTION

Accident prevention is another area in which heightened staff awareness and parent involvement pay off. In 1973, more than forty-three hundred children ages 1 to 4 in the United States died as a result of accidents. Accidental deaths account for almost half of all deaths in this age group. Accidents are the major health hazard for children ages 1 to 4 claiming more lives than the next ten leading causes of death combined.

Fatalities related to motor vehicles are responsible for 30 percent of young children's deaths. Other chief causes in rank order are drowning, fires, inhalation of food and other objects, poisoning, falls, and firearms. Accidents are also a major cause of disability. Each year, over 30 percent of young children suffer injuries requiring medical attention or involving at least one day of restricted activity (Metropolitan Life Insurance Co., 1975a).

Most accidents are preventable. Their prominence as a cause of death and injury among children highlights the need to make all administrators, teachers, and parents more aware of the hazards to which children are exposed. Special attention must be given to protecting children under six, as many accidents result from inadequate supervision. For example, in 1970, over sixty-seven thousand building fires were caused by children playing with matches (Metropolitan Life Insurance Co., 1973).

The younger the child, the greater the child's vulnerability. The accident mortality rate for infants is almost twice as high as for children ages 1 to 4. Suffocation caused fifty percent of all infant deaths due to accidents. Obstructions to breathing were from aspirated vomit (from not being burped), milk, and liquid foods; objects such as safety pins, buttons, marbles, and small parts of toys; mechanical suffocation by smothering in bedclothes or plastic materials; and strangulation from structural defects in cribs and playpens. Almost half of the infants who sustained fatal injuries were less than four months old. Motor vehicle accidents caused 20 percent of infant accidental deaths; and fires, falls, and drowning were the next most frequent causes of death (Metropolitan Life Insurance Co., 1975b).

Care-givers and parents of infants need to be especially careful not to leave a baby alone for a moment, not even to go answer the telephone. Suffocating, drowning, poisoning, and falling can take place in seconds. Each year nearly two million infants sustain at least one accidental fall during the first year of life—chiefly falls from cribs, high chairs, infant seats, changing tables, and adult beds. Most of these incidents could be avoided, not only by increased vigilance, but also by imposing long overdue safety regulations on the manufacturers of children's furniture, toys, automobile safety restraints, and a myriad of other products that are unnecessarily dangerous (Metropolitan Life Insurance Co., 1975b).³

³ Several agencies such as the Metropolitan Life Insurance Company, the National Easter Seal Society, and the National Safety Council publish free or inexpensive safety checklists, pamphlets, newsletters, and magazines for administrators, teachers,

A comprehensive approach to adult supervision of children in the center, outdoors on the playground, and in the community at large (swimming pools, etc.) for adults, youth, and older children requires a variety of measures. This is especially true for day care centers (including volunteers, bus drivers, etc.).

Your local Red Cross may offer in-service workshops on accident prevention for staff and staff. A few key concerns:

1. Do you have specific procedures for emergencies?
2. Do you have written policies for children to receive emergency medical attention?
3. Do you have emergency procedures for children?
4. Have you spoken with the local health department, public clinic, or private emergency room?
5. Are all staff, including volunteers, trained in emergency procedures?
6. Are your facilities safe? playgrounds? equipment?

Since accidents are the leading cause of death, it is crucial that all early childhood workers with first aid and with water safety courses in their countries rigorous courses in first aid. These courses emphasize that the responsibility rests on adults, and especially on parents.

We can see from the foregoing that effective approaches to accident prevention require the involvement of parents, teachers, administrators, and health workers. Throughout the country, day care centers are working together with various groups in the community to improve health. They are also arranging for first aid training. Great strides are being made. Truly comprehensive care is being developed. This trend will continue.

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A comprehensive approach to accident prevention needs appropriate adult supervision of children in a large number of areas: at home, at the center, outdoors on the playground, in or around cars, and in the community at large (swimming pools, parks, supermarkets, and so forth). All adults, youth, and older children should learn basic first aid and safety measures. This is especially true of parents and *all* early childhood staff (including volunteers, bus drivers, and kitchen staff).

Your local Red Cross may be able to provide free training courses or offer in-service workshops on first aid and accident prevention for parents and staff. A few key concerns are:

1. Do you have specific policies and procedures to follow in case of emergencies?
2. Do you have written permission from all parents to allow their children to receive emergency medical treatment?
3. Do you have emergency phone numbers posted?
4. Have you spoken with local agencies to establish the most expedient emergency routes? For example, do you rush a child to the hospital, public clinic, or private doctor depending on the type and degree of emergency?
5. Are all staff, including volunteers, aware of what to do in case of emergency?
6. Are your facilities as accident-proof as possible? toys? furniture? playgrounds? equipment? traffic areas? transportation systems?

Since accidents are the major cause of children's deaths and disabilities, it is crucial that all early childhood personnel be thoroughly familiar with first aid and with ways to prevent accidents. In many European countries rigorous courses in safety and first aid are required of all citizens. These courses emphasize that the major responsibility of children's protection rests on adults, and especially on parents and teachers.

We can see from the foregoing discussion of various child health problems that effective approaches to resolving such a wide variety of difficulties require the involvement of many community members, including parents, teachers, administrators, and numerous medical professionals. Throughout the country, day care and early childhood centers are calling together various groups in the interest of improving child nutrition and health. They are also arranging many in-service workshops on these subjects. Great strides are being made in spite of formidable obstacles, and truly comprehensive care is beginning to emerge. We feel confident that this trend will continue.

and parents that are valuable in helping to make children's environments as safe as possible. Further information and addresses are given at the end of the chapter (items 2, 3, and 4 in the Resources).

THE EFFECTS OF NUTRITION ON LEARNING AND BEHAVIOR

There is a growing concern in this country that the quality of nutrition for both adults and children should be greatly improved. A recent report by the Senate Select Committee on Nutrition and Human Needs (1977), entitled, *Dietary Goals for the United States*, stated that the major causes of death and disability in the United States are directly related to the diet we eat. These conditions include heart diseases, cerebrovascular diseases, stroke, many forms of cancer, hypertension, diabetes, cirrhosis of the liver, obesity, and dental decay. Evidence now indicates that most of these conditions begin to develop in childhood and are sustained by lifelong poor eating habits. Therefore, efforts to address their basic causes and prevent them must be directed toward children and their parents and teachers.

What are the effects of nutrition on children's behavior and their ability to learn? Any form of nutritional imbalance, whether it is a deficiency or an excess of protein, calories, vitamins, minerals, or other dietary constituents, can affect children's health and behavior in numerous ways. Iron-deficiency anemia, for example, not only reduces children's resistance to disease; it also lessens their stamina, endurance, vitality, and ability to pay attention and to learn.

Allergies Related to Diet

A growing body of research indicates that a majority of learning disabilities and behavior disturbances may be related to nutritional imbalances and associated health disorders (Birch and Gussow, 1970; Cott, 1977; Powers and Presley, 1978; Smith, 1979). One of the pioneers in this field is Dr. Ben F. Feingold, a pediatrician and allergist who has done extensive research into the relationship between food additives on the one hand (particularly artificial colors, flavors, and preservatives), and hyperactivity, behavior problems, and learning disabilities on the other. As an allergist he realized that any substance, natural or synthetic, could cause an adverse or allergic reaction in a susceptible individual. He searched the medical literature and found that food additives were known to trigger adverse and allergic reactions resembling "traditional" allergies in every system of the body; skin problems, such as hives, itching, and swelling; respiratory problems, such as asthma, coughs, laryngitis, and nasal inflammation; gastrointestinal problems, such as indigestion, constipation, and heartburn; problems in the skeletal system, such as pain and swelling in the joints; and perhaps most important, central-nervous-system problems, such as headaches and behavioral disturbances. The affected individuals rarely realized that additives might be a cause of their problems (Feingold, 1973).

Dr. Feingold began to suspect that perhaps food additives were one of the causes of hyperkinesis (hyperactivity) and learning disabilities, which affect some 10 percent to 20 percent of children in the United States. Although symptoms vary greatly from child to child, the basic

pattern of this condition is characteristic. The child is restless, uneasy, excitable, impulsive, short attention span, wide-eyed, easily distracted, has little patience, and is prone to frustration. The child is often clumsy, with small muscle movements involved more often than girls. The problem in a single family often occurs in a child of high intelligence yet fails to perform.

Dr. Feingold prescribes elimination diets from the diets of hundreds of children with the symptoms cited above. When a large number of the children are placed on these diets, they were calmer, able to pay attention, peaceful, and generally far less prone to offending food or food additives. When the offending food or food additive is removed accidentally, the problem usually returns within four hours and persisted for as long as it was possible to "turn on" and remove certain ingredients. The effect relationship between the diet and the behavior was established.

In the past five years, major studies, including double-blind studies, have also come from several countries, including Canada, Australia, and France. They support this theory. None of the studies about the immediate problem of the population (10 percent of every five or ten people) can demonstrate marked adverse effects to what degree everyone else is affected by incremental effects on some children.

Also, Dr. Feingold advises parents of children with learning disabilities to avoid allergic reactions to other food additives (Feingold, 1975; Feingold, 1973). Discovering which food or food additive to obtain a detailed health analysis of everything the child eats or drinks, as sugar, is suspect. The offending food or food additive, such as chocolate and cola, corn, fruits, and tomatoes. If a child has a reaction, it may provoke symptoms.

The diagnosis then is to

LEARNING AND BEHAVIOR

that the quality of nutrition has recently improved. A recent report on Food and Human Needs (1977), however, stated that the major causes of chronic diseases are directly related to the diet. Diseases such as cerebrovascular diseases, hypertension, diabetes, cirrhosis of the liver, and cancer now indicate that most of these diseases are sustained by lifelong habits. To address their basic causes and prevent them, we must inform parents and teachers about children's behavior and their nutritional balance, whether it is a deficiency of vitamins, minerals, or other dietary factors. This behavior in numerous ways significantly reduces children's resistance to disease, vigor, vitality, and ability to

the majority of learning disabilities are due to nutritional imbalances and deficiencies (Cott, 1970; Cott, 1977; Powers, 1977). One of the pioneers in this field is Dr. Feingold, who has done extensive research on the effects of food additives on the one hand (preservatives), and hyperactivity, on the other. As an allergist, he believes that food additives, like penicillin, could cause an adverse or allergic reaction. He searched the medical literature for known factors that trigger adverse and allergic reactions in every system of the body: skin and swelling; respiratory problems and nasal inflammation; gastro-intestinal constipation, and heartburn; pain and swelling in the joints; endocrine-system problems, such as those affecting the thyroid. The affected individuals rarely have other problems (Feingold, 1973). Perhaps food additives were one of the causes (together with learning disabilities, and mental retardation) of children in the United States. From child to child, the basic

pattern of this condition often includes some or all of the following characteristics. The child is in constant motion, is markedly fidgety, restless, uneasy, excitable, impulsive, and often aggressive. The child has a short attention span, wide mood swings, is unable to concentrate, is easily distracted, has little patience, and has a very low tolerance for failure or frustration. The child is often uncoordinated and clumsy in both large and small muscle movements and frequently has sleeping problems. Boys are involved more often than girls, and there may be one or several children with the problem in a single family. The hyperactive child is generally of normal or high intelligence yet fails at school. Adults may suffer similar symptoms.

Dr. Feingold prescribed the elimination of artificial food additives from the diets of hundreds of children who showed many of the behavioral symptoms cited above. When all of the offending chemicals were removed, a large number of the children tested showed remarkable improvement. They were calmer, able to pay attention better, more able to sit still, more peaceful, and generally far more in control of themselves. Whenever the offending food or food additive was reintroduced, either deliberately or accidentally, the problem behavior immediately returned within two to four hours and persisted from one to four days. In other words, it was possible to "turn on" and "turn off" these children at will by adding or removing certain ingredients from their diets. Thus, a tentative cause-and-effect relationship between food additives and behavior disturbances was established.

In the past five years, this relationship has been confirmed in several major studies, including double-blind, cross-over studies. Favorable reports have also come from several countries, including England, Sweden, Canada, Australia, and France. On the other hand, some reports have failed to support this theory. Nonetheless, this research raises serious questions about the immediate problems the additives may pose to a significant portion of the population (10 percent to 20 percent). Whereas one out of every five or ten people may have genetic variations that cause them to demonstrate marked adverse reactions to food additives, it is not known to what degree everyone else is affected. For instance, are there subtle or incremental effects on some individuals that escape obvious notice?

Also, Dr. Feingold and other allergists report that many children with learning disabilities and behavior problems often have adverse or allergic reactions to other dietary constituents in addition to the food additives (Feingold, 1975; Speer, 1970; Rapp, 1974). Their approach to discovering which food or foods might be causing problems has been to obtain a detailed health and nutritional history, including a food diary of everything the child eats or drinks. Any food that is used in excess, such as sugar, is suspect. The other most common offenders are cow's milk, chocolate and cola, corn, eggs, legumes, wheat and other grains, citrus fruits, and tomatoes. If a child is very sensitive to a substance, any amount may provoke symptoms.

The diagnosis then rests on an elimination-and-challenge process

where the most suspicious food or foods are completely removed from the diet for three weeks. Each food is then returned to the diet, as a challenge, at three-day intervals to see if it provokes either physical or psychological symptoms. If it does, it is avoided for a few months and then retested. If it again causes problems, it is avoided indefinitely and other foods used in its place. If there is no problem, it can be eaten in moderation.

Throughout this process, the parents keep a careful food diary and note any changes in behavior, moods, or health conditions. A common example is the elimination of sugar from the diet of irritable and moody children who usually experience wide mood swings and marked changes in energy levels. For the first few days without sugar, children go through a withdrawal process during which they crave sugar and are even more irritable, moody, and depressed than usual. They may also complain of aching all over and of other flu-like symptoms. Then, after three or four days they begin to feel better, have more energy, and be in a more cheerful mood. The mood swings stabilize and they have a fairly steady energy level and a better disposition throughout the day. After three weeks, when sugar is reintroduced by letting them go back to their former diet, the mood swings and marked changes in energy levels appear within hours and persist until sugar is again eliminated from this diet.

Elimination-and-challenge diets often uncover food allergies and intolerances that have been causing chronic, low-grade illness, or psychological disturbances for years (Mackarness, 1976). Certainly, many psychological and behavioral disorders are due entirely to disturbances in human relationships. However, as in the above case of moodiness, many such disorders that may appear primarily psychological (as opposed to physiological) in nature have significant nutritional components. Dr. Feingold and others reported this with children who were hyperactive or had learning disabilities; Dr. Leonard Hippchen (1978) and others reported similar patterns with juvenile delinquents.

Environmentally Induced Problems

One of the themes running through these works is that certain susceptible individuals have unusual biochemical intolerances to common substances found in their environments. Exposure to these substances produces adverse or allergic reactions that result in physical symptoms, psychological symptoms, or both. Any part of the body, including the brain, can be affected. When the site of the adverse reaction is the central nervous system, a wide variety of "psychological" symptoms can result, ranging from hilarity, hyperactivity, and aggression, to loss of memory, depression, and confusion. An example is the effects of alcohol on the brain and behavior.

Any substance, natural or synthetic, can cause symptoms in a susceptible individual. Also, a single substance, such as milk, may cause vir-

tually any allergic manifestation such as asthma, headache, earache, nausea, diarrhea, diffuse abdominal pain, and fatigue (Speer, 1976).

Frequently, children do not appear to switch from organ to organ until age 5, then until age 10, and then develop the original milk allergy. Since and many people have no tools for this are an exhaustive detective work to determine the cause. Tools for this are an exhaustive elimination-and-challenge diets, and v (Randolph and Moss, 1980; Ra

CLINICAL ECOLOGY: AN EMERGING OPTIMAL HEALTH

An emerging branch of allergy is clinical ecology, which deals with intolerances to foods, chemicals, and environmental factors. In contrast to the common pollen, mold, and food allergies, clinical ecology is a newer field. Dr. Randolph, Dr. Lawrence Dickerson, and Dr. Lawrence Dickerson have been in the field since the 1930s. It focuses on the person (rather than any particular environment). It recognizes that a person may have unusual sensitivities to food, water, air, buildings, or other environmental factors. It also investigates the influences of the physical and chemical quality of the air, and pollution (Speer, 1976; Ott, 1976; Soyka, 1977).

Another closely related field is orthomolecular nutrition. Dr. Linus Pauling (1973) coined the term *orthomolecular* (molecules) in optimal nutrition focuses on the provision of adequate amounts of essential nutrients. Orthomolecular nutrition stresses the balance of physical and psychological conditions amenable to correction. Factors native to the body, such as hormones, are provided in optimal amounts. Even with essential vitamins and mineral supplements (Lesser, 1980; Kunin, 1974). In clinical trials, orthomolecular nutrition has been shown to be effective in the treatment of a wide variety of conditions.

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Parents keep a careful food diary and monitor health conditions. A common example of the diet of irritable and moody children is mood swings and marked changes in behavior without sugar, children go through mood swings and marked changes without sugar, children go through mood swings and marked changes without sugar, children go through mood swings and marked changes without sugar. They may also complain of symptoms. Then, after three or four days of high energy, and be in a more cheerful mood. They have a fairly steady energy level throughout the day. After three weeks, when they go back to their former diet, the symptoms appear within hours and disappear on this diet.

Parents uncover food allergies and infections, low-grade illness, or psychosomatic symptoms (Speer, 1976). Certainly, many psychosomatic symptoms are due entirely to disturbances in the diet. In the above case of moodiness, many children have psychological (as opposed to physical) symptoms. Dr. Randolph (1978) and others reported

works is that certain susceptible children have intolerances to common substances and that these substances produce adverse physical symptoms, psychological symptoms, including the brain, can be affected. The central nervous system symptoms can result, ranging from loss of memory, depression, and alcohol on the brain and behavior. These can cause symptoms in a susceptible child, such as milk, may cause vir-

tually any allergic manifestation in any organ, including, for example, asthma, headache, earache, nasal and bronchial congestion, constipation, diarrhea, diffuse abdominal pain, foul breath, excessive sweating, tension, and fatigue (Speer, 1976).

Frequently, children do not outgrow a food; rather, the allergy appears to switch from organ to organ. Hence a child might have recurrent ear infections until age 5, then have alternating constipation and diarrhea until age 10, and then develop migraine headaches as a teenager, all due to the original milk allergy. Since all these conditions can have other causes, and many people have no trouble at all with milk, it requires careful detective work to determine the true source of the problem. The main tools for this are an exhaustively detailed history, food diaries, elimination-and-challenge diets, and various kinds of laboratory and allergy tests (Randolph and Moss, 1980; Rapp, 1979).

CLINICAL ECOLOGY: AN EMERGING APPROACH TO OPTIMAL HEALTH

An emerging branch of allergy and general medicine that deals with intolerances to foods, chemicals, and other environmental factors—in addition to the common pollen, mold, dust, and dander allergens dealt with by traditional allergists—is clinical ecology. It owes its origins to Dr. Theron Randolph, Dr. Lawrence Dickey, and others who have been working in the field since the 1930s. It focuses on the interaction between the whole person (rather than any particular organ or system) and his or her entire environment. It recognizes that each person is biochemically unique and may have unusual sensitivities to substances commonly encountered in food, water, air, buildings, or other components of the environment. It also investigates the influences on health of weather, light, ions (the electrical quality of the air), and pollution (Randolph and Moss, 1980; Dickey, 1976; Ott, 1976; Soyka, 1977).

Another closely related emerging branch of medicine that focuses more specifically on nutrition is orthomolecular medicine. Linus Pauling (1973) coined the term *orthomolecular* to mean the provision of the right nutrients (molecules) in optimum amounts. Whereas much of traditional nutrition focuses on the provision of minimal daily requirements, orthomolecular nutrition stresses the provision of optimal, rather than merely adequate, amounts of essential nutrients. From this perspective, many physical and psychological conditions may spring from biochemical imbalances amenable to correction by the provision of various nutritional factors native to the body, such as vitamins, minerals, and amino acids, in optimal amounts. Even with excellent diets, many people require additional vitamin and mineral supplements for optimal health (Rosenberg, 1974; Lesser, 1980; Kunin, 1980). By means of biochemical tests and clinical trials, orthomolecular physicians can discover which patients have

unusually high requirements for certain vitamins, minerals, or other dietary constituents.

Some of their work is similar to that of the clinical ecologists in that orthomolecular physicians also try to determine which dietary factors patients may need to avoid due to food allergies or intolerances. They too are holistic in their approach and consider other environmental and lifestyle factors, such as stress and exercise, in addition to nutrition. In general, both groups prefer to reserve the use of drugs for problems in which exhaustive search and trials of nutritional and ecological measures have failed.

The two fields of orthomolecular medicine and clinical ecology may well serve as the foundation for the future direction of medicine.⁴ They view each person's health in the context of the total environment and determine which factors to add (such as vitamins) or subtract (such as food additives) to bring the person's health back into balance. Because both approaches require that the patient be a close collaborator with the health practitioner in diagnosis and treatment, they strongly emphasize the need for each individual to understand and take responsibility for meeting his or her unique health and nutritional requirements. Both approaches also stress the importance of educating parents, teachers, and children to develop appropriate health attitudes and habits to ensure a sound foundation for children's lifelong health and nutritional practices.

GUIDELINES FOR DEVELOPING OUTSTANDING NUTRITIONAL PROGRAMS

Where do most children (and adults) in the United States get their ideas and attitudes about nutrition? The report of the Senate Select Committee on Nutrition and Human Needs (1977a) stated that television and other advertising were certainly major influences and that in 1975 over a billion dollars was spent on food advertisements on television alone. The report noted that most food advertisements actually promote poor eating habits and suggested that ads be used exclusively to present the public with wholesome rather than negative food choices.

For example, the report expressed concern over advertising that encourages children to eat nonnutritious, highly processed "junk foods," such as sodas, candies, sweetened cereals, and most snack foods. Not only are these foods unhealthful because they take the place of more nutritious foods; they also add unnecessary sugar, salt, fat, and artificial colors, flavors, and other additives to children's diets. This undermines children's

⁴ See the References and Resources at the end of the chapter for more information on these two emerging fields of medicine. Also, The Huxley Institute, 1114 First Ave., New York, NY 10021, maintains a nationwide directory of physicians who practice orthomolecular medicine and clinical ecology.

health and consequently has public opinion and public policy harmful, practice, the responsibility will rest primarily on Congress and the advertising industry. Considering banning all advertising is immoral and destructive.⁵

In the meantime, we must have accepted into our diets such ads or for other reasons. If they're not, we need to stop them. The following guideline is selective criteria based on the essential to remember that nutrition. Thus our dietary decisions are more reliable than the views expressed in examined assumptions of popular evidence, then, we need to examine ideas and practices. We must decide what to select and what to avoid.

The Senate report summarizes

Our diets have changed rapidly and have had very harmful effects on our health. The threat to public health as small as it is and are linked directly to health problems and killer diseases. In all, six of the most common diseases have been linked to our diets. The changes are demonstrably large. The question is: how do we change our diet but why not eat less fat . . . less sugar, less salt, less grain cereals? There are non-nutritious foods to be expected (Select Committee on Nutrition and Human Needs, 1977a).

The specific guidelines for television and preparation include the following:

1. Eat less refined sugar and
2. Eat less salt and foods high in fat
3. Eat less red meat and
4. Eat fewer foods that are

⁵ The group that has been in support of Congress and the Federal Trade Commission's Action for Children's Television. It has written to ACFTU in support to this effort, wrote to ACFTU.

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health and consequently has negative effects on their behavior. Until pub-
lic opinion and public policies force the food industries to abandon this
harmful, practice, the responsibility of protecting children from such mis-
education will rest primarily on parents and teachers. One encouraging
sign is that Congress and the Federal Trade Commission are seriously con-
sidering banning all advertising directed at children on the grounds that it
is immoral and destructive.⁵

In the meantime, we must carefully scrutinize many of the foods we
have accepted into our diets and into our children's diets on the basis of
such ads or for other reasons to see whether these foods are good for us.
If they're not, we need to stop eating them and substitute more nutritious
ones. The following guidelines adapted from the Senate report give some
selective criteria based on the best scientific information available. It is
essential to remember that nutrition is a science, albeit a developing one.
Thus our dietary decisions can and should be based on something more
reliable than the views expressed in mass-media advertisements or the un-
examined assumptions of popular "common knowledge." In light of scien-
tific evidence, then, we need to examine and perhaps modify our nutri-
tional ideas and practices. We need to consider both aspects of nutrition:
what to select and what to avoid.

The Senate report summarized its concerns by stating:

Our diets have changed radically within the last 50 years, with great and often
very harmful effects on our health. These dietary changes represent as great a
threat to public health as smoking. Too much fat, too much sugar or salt, can be
and are linked directly to heart disease, cancer, obesity, and stroke, among other
killer diseases. In all, six of the ten leading causes of death in the United States
have been linked to our diet. . . . The risks associated with eating this diet are
demonstrably large. The question to be asked, therefore, is not why should we
change our diet but why not? What are the risks associated with eating less meat,
less fat . . . less sugar, less salt, and more fruits, vegetables . . . and . . . whole
grain cereals? There are none that can be identified and important benefits can
be expected (Select Committee on Nutrition and Human Needs, 1977a).

The specific guidelines the report suggested for changes in food selec-
tion and preparation include the following:

1. Eat less refined sugar and foods high in sugar content.
2. Eat less salt and foods high in salt content.
3. Eat less red meat and substitute poultry, fish, and other protein
sources, such as grains and legumes.
4. Eat fewer foods that are high in fats.

⁵The group that has been instrumental in bringing this problem to the attention
of Congress and the Federal Trade Commission is a nonprofit organization entitled
Action for Children's Television. If you wish further information or want to lend your
support to this effort, wrote to ACT, 46 Austin St., Newtonville, MA 02160.

5. Eliminate food additives, especially artificial colors, flavors, and preservatives, to the greatest degree possible.
6. Eat more fruit, vegetables, and whole grains (1977a, pp. 13, 55).

How can we translate these dietary guidelines into practice? Some suggestions of ways to apply each of the guidelines, along with brief rationales, follow.⁶

Eat Less Refined Sugar and Fewer Foods High in Sugar Content

This refers to refined sugars such as regular white sugar and does not include the naturally occurring sugars found in fruits, vegetables, and whole grains. Refined sugar has been linked with many health disorders, including dental decay, mood swings, obesity, and heart disease. The Senate report suggests reducing refined sugar intake by 40 percent to 50 percent so that it would make up about 10 percent of your daily calories. You might want to consider eliminating it completely, particularly for children. The problem with sugar is that for many people it is addicting in the sense that they will continue to eat it even when they are full, and they will choose to eat it instead of eating more nutritious foods. Because sugar is pure carbohydrate and contains no vitamins, minerals, enzymes, protein, fat, or other nutritional elements, its calories are known as "empty" calories. Yet its digestion requires both vitamins and minerals, so the body must draw these nutrients from its own stores. Thus, the other foods in the diet must be extremely rich in nutrients in order to compensate for sugar's "empty" calories.

To cut back on sugar, replace cold cereals with old-fashioned oatmeal, or try other kinds of food for breakfast, such as soup and sandwiches. Any food that is nutritious for supper or lunch is also an appropriate food for breakfast. Rather than buying commercial snacks or baked goods, make your own and use far less sugar. Eliminate soft drinks and sugared fruit drinks and substitute water, fresh fruit, or 100 percent pure fruit juices. Judging from the sweetness in nature, fruits should serve as the major source of sweetness in our diets, so it makes sense to move in that direction and to educate children and adults to prefer fruits over synthetic sweets.

Eat Less Salt and Foods High in Salt Content

Salt has been linked with hypertension, heart disease, and obesity and should be used very sparingly, if at all. Although people rarely think of

⁶ For more detailed information, see *Dietary Goals in the United States* (item 1a in the Resources at the end of the chapter). I have added many of the practical suggestions in this section to help make the guidelines more readily useful. They are in keeping with the spirit and intent of this report.

excessive salt consumption in the Senate report said that c prone to hypertension and toward hypertension" (Selec 1977a, p. 49).

The report recommend cent and states that most pe need. The goal set for adults less than a teaspoon. This go any salt to any food or eat People will obtain ample salt and meats. Highly salted sna and spices for salt and salty s artificial salt or sugar substit able substances in themselve sweet and salty foods. This ir

Eat Less Red Meat and Subst Sources, Such as Whole Grain

A major reason for this guic content, and excessive fat in heart disease, and other majo

Beef is also very expens ically. It takes approximatel of beef, versus only two or 1 of chicken, and one or two p Furthermore, the grains fed oats, or rice—are usually an a feed the world by the year heavily on plant proteins and fish and chicken rather than c

When you eat less beef, key, eggs, low-fat dairy prod Be sure to include in your die egg yolks, green leafy vegetak

Eat Fewer Foods That Are H

The American diet now deri Although there has been a gre there is general agreement th the most concentrated sourc

tificial colors, flavors, and preservatives.

grains (1977a, pp. 13, 55).

ies into practice? Some suggestions, along with brief rationales,

High in Sugar Content

White sugar and does not in fruits, vegetables, and whole many health disorders, including heart disease. The Senate by 40 percent to 50 percent of your daily calories. You eat, particularly for children. People it is addicting in the sense when they are full, and they will eat nutritious foods. Because sugar is rich in minerals, enzymes, protein, and vitamins are known as "empty" calories and minerals, so the body needs. Thus, the other foods in the diet are in order to compensate for

Diets with old-fashioned oatmeal, such as soup and sandwiches. Lunch is also an appropriate meal. Commercial snacks or baked goods, sugary soft drinks and sugared fruit, or 100 percent pure fruit juice, fruits should serve as the basis. It makes sense to move in that direction to prefer fruits over synthetic

heart disease, and obesity and although people rarely think of

Goals in the United States (item 1a) included many of the practical suggestions readily useful. They are in keep-

excessive salt consumption in relation to children's nutritional problems, the Senate report said that one in five people in the general population is prone to hypertension and "millions of children and youths are moving toward hypertension" (Select Committee on Nutrition and Human Needs, 1977a, p. 49).

The report recommends cutting salt consumption by 50 to 85 percent and states that most people eat at least ten times more salt than they need. The goal set for adults is three to five grams of salt per day, which is less than a teaspoon. This goal will be met for most people without adding any salt to any food or eating any foods to which salt has been added. People will obtain ample salt in such foods as milk, cheese, fish, chicken, and meats. Highly salted snack foods should be avoided. Substitute herbs and spices for salt and salty seasonings such as catsup and soy sauce. Avoid artificial salt or sugar substitutes too, because, aside from being questionable substances in themselves, they stimulate your continued craving for sweet and salty foods. This includes diet sodas.

Eat Less Red Meat and Substitute Poultry, Fish, and Other Protein Sources, Such as Whole Grains and Legumes

A major reason for this guideline is that red meat usually has a high fat content, and excessive fat in the diet has been linked with obesity, cancer, heart disease, and other major health disorders.

Beef is also very expensive and wasteful, both financially and ecologically. It takes approximately ten pounds of grain to produce one pound of beef, versus only two or three pounds of grain to produce one pound of chicken, and one or two pounds of grain to produce one pound of fish. Furthermore, the grains fed to these animals—for example, wheat, corn, oats, or rice—are usually an appropriate food in themselves for people. To feed the world by the year 2000, we are going to need to rely far more heavily on plant proteins and less-expensive animal-protein sources such as fish and chicken rather than on beef.

When you eat less beef, substitute various kinds of fish, chicken, turkey, eggs, low-fat dairy products, whole grains, legumes, nuts, and seeds. Be sure to include in your diet ample sources of iron, such as fish, poultry, egg yolks, green leafy vegetables, dried beans, peas, and lentils.

Eat Fewer Foods That Are High in Fats

The American diet now derives about 40 percent of its calories from fat. Although there has been a great controversy about the role of fats in diets, there is general agreement that we should be eating much less fat. Fats are the most concentrated sources of food energy, and (as mentioned earlier)

in high doses they have been linked with obesity, heart disease, and cancer. To reduce fat consumption, avoid fried foods, use fewer oils, and replace fatty meats with lean ones or with poultry, fish, beans, and whole grains.⁷

Eliminate Food Additives, Especially Artificial Colors, Flavors, and Preservatives, to the Greatest Degree Possible

This guideline is extremely important and is just beginning to be appreciated by the general public. In addition to the problems of excessive sugar, salt, and fat consumption, serious questions are being raised concerning the safety of food additives and their relationships to cancer, allergies, hyperactivity, and behavior disorders in children and adults. The technological feasibility of removing these substances entirely from the food supply has been demonstrated by the many European countries that have banned most additives because of their suspected link with cancer. For instance, Britain bans BHA and BHT, which are among the most common preservatives used in the United States. There are safer alternatives.

Meanwhile, the American food industries, operating on the assumption that additives are harmless, continue to produce over a billion pounds and over thirty-eight hundred different kinds of them each year. The average person in the United States eats an estimated five to ten pounds of these additives yearly (Feingold, 1974).

Highly refined and processed foods, such as white bread, fast foods, and convenience foods, now constitute over half of the American diet. By making most of your foods from scratch using primary ingredients such as fresh fruits and vegetables and whole grains, you can avoid most additives, as well as sugar, salt, and fat. Whenever you use packaged foods, read the labels carefully and choose those foods with the fewest additives.

Eat More Fruits, Vegetables, and Whole Grains

At present only 20 percent of the calories in the diet of the average person in the United States come from these sources. This figure should be raised to approximately 70 percent. These foods are excellent sources of vitamins and minerals; moreover, they are very bulky and high in the fiber essential for the proper functioning of the intestines.

In rural communities in the developing countries that have adequate food supplies, where some 70 percent of the diet is made up of whole grains, vegetables, and fruits, food only takes from twelve to twenty-four hours to pass through the body. By contrast, because of the lack of fiber

and bulk in the United States, it takes seventy-two hours to pass the food. Data gathered by Burkitt (1974) show that high-fiber diets may be factors in preventing cancer and several other disorders.

Fiber may also play a role in the prevention of obesity, as fiber-rich foods take longer to chew, and to eat less (Burkitt, 1974).

To increase the fiber content of your diet, use whole grains as white flour and white rice. Use bran, wheat germ, whole wheat flour, breads, pastas, rice bran, wheat bran, or yogurt, and soup.

Eat lots of fresh vegetables and fruits. They are excellent. Ideally, roughage comes from fresh produce, not frozen or canned ones. Right now, less than 10 percent of the diet in the United States consists of fresh produce. You need to eat two or three times as much.

In summary, these guidelines are for selection and preparation of foods. Use more fiber, whole grains, and animal proteins, and plant proteins. Explore new ones.

One word of caution: Change your diet with care. It requires thought, time, and effort. Make gradual changes by making gradual changes. It is in the long run. For further reference, see the chapter.

Finally, such dietary changes are not easy. People find that when they eat junky snacks, and sugary cereals, in one week you might substitute \$10 worth of junky snacks for healthy food. It can greatly improve the quality of life. You might also experiment with produce and ask store managers for help. You may be surprised how much time or energy to

⁷See the Resources at the end of the chapter for cookbooks containing recipes that substitute other protein sources for beef.

obesity, heart disease, and cancer. Foods, use fewer oils, and replace y, fish, beans, and whole grains.⁷

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and bulk in the United States diet, food often takes from thirty-six to seventy-two hours to pass through the body. Medical and epidemiological data gathered by Burkitt (1978) and others suggest that the longer transit time through the intestines and the other internal changes caused by low fiber diets may be factors in the development of intestinal and rectal cancers and several other disorders.

Fiber may also play an important role in the prevention and allevia-
tion of obesity, as fiber-rich foods cause people to feel satisfied more
quickly than low-fiber foods with the same caloric value. Also, fibrous
foods take longer to chew, which tends to make people eat more slowly
and to eat less (Burkitt, 1978).

To increase the fiber content of your diet, replace refined grains such
as white flour and white rice with whole grains and whole-grain products.
Use bran, wheat germ, whole wheat, brown rice, oats, corn, rye, and millet
for your flour, breads, pasta, cereals, and crackers. You might also add
rice bran, wheat bran, or wheat germ to your breads, muffins, cereals,
yogurt, and soup.

Eat lots of fresh vegetables, and eat at least half of them raw. Salads
are excellent. Ideally, roughly half of your food intake should be vege-
tables and fruits, as fresh, whole and unprocessed as possible. If you can-
not get fresh produce, frozen vegetables and fruits are preferable to canned
ones. Right now, less than 15 percent of the diet of the average person in
the United States consists of fruits and vegetables, so most people will
need to eat two or three times as many as usual to meet this goal.

In summary, these guidelines suggest the following changes in food
selection and preparation: Use less refined foods, fat, sugar, salt, and addi-
tives. Use more fiber, whole grains, fresh fruits and vegetables, low-fat
animal proteins, and plant proteins. Eat a wide variety of foods and ex-
plore new ones.

One word of caution: be moderate. At first, changing your diet re-
quires thought, time, and energy. You are most likely to achieve lasting
changes by making gradual substitutions, rather than by leaping from one
extreme to another. It is important to understand what you are doing and
why. For further reference, see the annotated Resource list at the end of
the chapter.

Finally, such dietary changes *need not be expensive*; indeed most
people find that when they eliminate such items as sodas, candy, junky
snacks, and sugary cereals, their food bill actually goes down. For instance,
in one week you might substitute \$10 worth of fruit and unsalted nuts for
\$10 worth of junky snacks. By making such substitutions gradually, you
can greatly improve the quality of your diet without increasing the ex-
pense. You might also explore local sources such as farmers' markets for
produce and ask store managers about bulk and wholesale rates for certain
staples. You may be surprised to find that it does not necessarily require
much time or energy to locate considerably cheaper sources of quality

foods. In fact, many day care and early childhood centers have found that this type of food service is from 10 to 20 percent less expensive, even when including the cost of preparation time.⁸ When you reflect on such questions as, "What does nutrition have to do with your health, your state of mind, your disposition, your motivation, and your ability to learn?," you will surely find that we cannot, in good conscience, afford to provide less than the best for our children and ourselves.

NUTRITION EDUCATION ACTIVITIES

The purpose of nutrition education is to teach children the correct information, attitudes, and habits that will comprise the foundation of their lifelong health practices. For young children, a nutrition education program can be centered around their participation in the preparation and consumption of exemplary snacks and meals. This learning experience can be integrated into the ongoing school curriculum and can help to fulfill general educational goals. You can introduce the children to wide varieties of high-quality foods that meet the standards previously outlined, including fresh fruits and vegetables; whole grains and protein alternatives, such as nuts, seeds, beans, and legumes; as well as meat, fish, poultry, and dairy products. The children can participate in the preparation, serving, sampling, enjoying, and discussion of all kinds of nutritious foods by making soups, salads, juices, casseroles, main dishes, and baked goods in their classes for their own enjoyment and to share with their families. Teachers, parents, and food service staff report that this type of daily nutrition education program helps to develop positive eating attitudes and habits. The children make more knowledgeable food choices, are more willing to try new foods, develop the initiative to eat more appropriate snacks (even when they are outside the classroom), and eat more well-balanced meals. They also become competent and eager to help in the preparation, serving, and cleaning up of refreshments, snacks, and meals. The social aspects of eating together can be stressed through attention to table manners, cooperation, sharing, taking turns, and engaging in polite conversation. Children thereby learn to extend and accept hospitality graciously and happily. They learn to prepare, serve, and share delicious, attractive, pleasing meals, in a warm, peaceful, and loving atmosphere.

Most aspects of the ongoing school curriculum may be integrated within the nutrition education program. For example, young children may improve their perceptual skills by using their five senses to learn about the colors, textures, smells, tastes, shapes, weights, and moistures of various foods. They can practice fine-motor coordination by handling foods and

⁸ See the Resources at the end of the chapter for cookbooks and guidebooks on how to use more whole and natural foods. *Better Food for Public Places* is especially useful.

utensils—chopping, mixing, sifting, and so on. Cognitive skills may be strengthened by sorting group fruits and vegetables, or by cutting an apple into halves so that an apple maintains its shape from round, red apple into juice. Fine motor skills may be exercised by practicing cutting and pursuing tasks to completion. When they prepare fruits for a snack, children's development may also be promoted. Food generally stimulates emotional responses for acceptance of new and unfamiliar foods. A positive nutritional atmosphere within the home and school, where adults are both of great importance.

The nutrition education program can include many activities. For instance, language activities may include spelling of the names of various foods. Mathematics activities can include counting, measuring, and dividing food equally among children. Science activities might include experiments (basic chemistry involved in food preservation, such as canning, and the elementary techniques of cooking, such as melting), and the elementary techniques of social studies activities could include learning about the social aspects involved in producing food, the various symbolic meanings of food, and many fascinating projects related to food. For example, social studies activities might include a national dinner, eating out at restaurants, and taking field trips to farms. Science activities might include learning about food habits, and starting family, school, and community gardens. They might also include basic consumer education, learning how to protect themselves from food in advertising. An ongoing curriculum might include organic gardening, nutrition, and means of reversing the

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childhood centers have found 20 percent less expensive, even more.⁸ When you reflect on such things as your health, your state of mind, and your ability to learn?" and conscience, afford to provide ourselves.

Each child the correct information to form the foundation of their learning, a nutrition education program is an important part of the preparation and learning. This learning experience can be integrated into the curriculum and can help to fulfill the needs of the children to wide varieties of foods previously outlined, including carbohydrates and protein alternatives, such as meat, fish, poultry, and dairy products. The preparation, serving, sampling of nutritious foods by making pies, and baked goods in their homes with their families. Teachers, through this type of daily nutrition education, are helping to instill positive attitudes and habits. The children are more willing to try new foods, are more appropriate snacks (even eat more well-balanced meals). They help in the preparation, serving, and eating of meals. The social aspects of eating, such as attention to table manners, coming in polite conversation. Childlike politeness graciously and happily. Pleasant, attractive, pleasing meals,

The curriculum may be integrated with other subjects. For example, young children may use their five senses to learn about the textures, colors, and moistures of various foods. Learning about nutrition by handling foods and

For cookbooks and guidebooks on *Food for Public Places* is especially

utensils—chopping, mixing, sifting, stirring, squeezing, and pouring. Their cognitive skills may be strengthened by practicing classification when they group fruits and vegetables, or practicing conservation when they observe that an apple maintains its distinctive taste throughout changes in form from round, red apple into juice, pie, or applesauce. Their volitional skills may be exercised by practicing self-control, paying attention, setting goals and pursuing tasks to completion, and practicing delayed gratification (as when they prepare fruits for a salad before eating them). Their emotional development may also be promoted by the nutrition education experience. Food generally stimulates emotional reactions; likes, dislikes, and criteria for acceptance of new and unfamiliar foods are related to this. The emotional atmosphere within the group at mealtimes and the modeling by adults are both of great importance.

The nutrition education program relates to all academic areas. For instance, language activities might include learning the vocabulary and spelling of the names of various foods and kitchen utensils. Reading and mathematics activities can include reading recipes, packages, and ingredients; dividing food equally among people; and computing simple fractions. Science activities might cover the relationship of diet to health, the basic chemistry involved in food transformation (for example, why ice melts), and the elementary technology involved in kitchen machines. And social studies activities could include discussion of types of professionals involved in producing food, the development of agriculture, and the various symbolic meanings of foods in different cultures. You can generate many fascinating projects relating to each of the above academic areas. For example, social studies activities might include preparing an international dinner, eating out at restaurants of various nationalities and ethnic groups, and taking field trips to farms, farmers' markets, and supermarkets. Science activities might include sprouting seeds, studying animals' food habits, and starting family, school, and community vegetable gardens. You might also include basic consumer education to help the children and their parents learn how to protect themselves by critically analyzing the claims in advertising. An ongoing concern with environmental protection might deal with organic gardening, recycling, avoiding waste, energy conservation, and means of reversing the pollution of air, water, and food.

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160 HEALTH, SAFETY, AND NUTRITIONAL REQUIREMENTS OF YOUNG CHILDREN

RESOURCES

HEALTH, SAFETY, AND NUTRITION

1. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.
 - a. *Dietary Goals for the United States*. Second edition, Senate Select Committee on Nutrition and Human Needs, United States Senate. February 1977. Price \$2.30. Stock no. 052-070-604376-8.
 - b. *Screening Children for Nutritional Status: Suggestions for Child Health Programs*. 22 pp. 1973. Price \$0.40. DHEW pub. no. (HSM) 73-5603.
 - c. *Day Care Health Services: A Guide for Project Directors and Health Personnel*. By A. Frederick North, Jr., M.D. 81 pp. 1971. Price \$0.75. DHEW pub. no. 72-4, stock no. 1791-0162.
 - d. *Vision Screening of Children*. By Jane S. Lin-Fu, M.D. 24 pp. 1971. Price \$0.25. PHS pub. no. 2042.
2. Available free from the Metropolitan Life Insurance Company, Health and Welfare Division, One Madison Avenue, New York, NY 10010. This company provides excellent health education materials to individuals and groups for free. Write and request a catalog. We have often ordered twenty or more copies of various booklets for in-service workshops or parents' meetings. They have proved to be highly satisfactory materials. An example of one of these booklets follows.

Looking for Health. 32 pp. Strongly recommended for all center staff. A professional reference for people working with children—teachers, administrators, nurses, and other school health personnel. Photographs illustrate clues to illnesses and chronic health problems often seen among school children. Emphasizes the teacher's role as health observer and the importance of communication and cooperation among home, school, and community resources.

The following materials are either free or inexpensive. Write and request catalogs and price lists, and ask whether some materials might be free to child care organizations such as yours. (Use official stationery, or if you have none, simply explain your program.) These materials are useful for all center staff and parents.

3. The National Easter Seal Society for Crippled Children and Adults, 2023 West Ogden Ave., Chicago, IL 60612. They publish safety checklists to help parents and teachers spot potential hazards that may exist in the home or at the center.
4. The National Safety Council, 425 N. Michigan Ave., Chicago, IL 60611. They produce a superb magazine and a large catalog of materials on safety and accident prevention.
5. The American Dental Association, 211 East Chicago Ave., Chicago, IL 60611. Request their catalog and specify interest in materials for young children, parents, and staff.

Nutrition Education Activity Books

Creative Food Experiences for Children, by Mary Goodwin and Geraldine Pollen, 1972. Center for Science in the Public Interest, 175 "S" Street, N.W., Washington, DC 20009. \$4.50. (Request a list of their other publications too.) This resource-and-

activity book for parents and children includes activities, games, recipes, and more. *Kids Are Natural Cooks: Child-tested Recipes for Parents' Nursery School*, by Parents' Nursery School, 100 Mont Street, Boston, MA 02101. \$2.95. Tells how to involve young children in cooking. *The Mother-Child Cookbook: An International Cookbook*, by Coast Publishers, Menlo Park, CA. Involves children ages 2 to 5 in cooking. It also contains recipes for additives, and highly processed foods. *Cooking and Eating with Children*, by national, 3615 Wisconsin Ave. More ideas of food-related activities.

Guidebooks and Cookbooks for

The Supermarket Handbook. By N. Sigmet, The New American I, New York, NY 10019. \$1.95. This "designed to guide you past the supermarket to the whole, healthy food." *Better Food for Public Places: A Guide for Moyer*. 1977. Rodale Press, Emmaus, PA. Institutions—daycare centers, schools, etc.—serve food to groups of people. Natural rather than processed food. *The Good Goodies, Recipes for Natural Foods*. Floss Dworkin. 1974. Rodale Press, Emmaus, PA. Delicious recipes that use whole natural sweeteners for sugar. *The Natural Foods Sweet Tooth*. Rodale Press, Emmaus, PA. Communications, Inc., 919 Th

Documents, U.S. Government Printing

second edition, Senate Select Committee
on Labor and Human Resources, U.S. Senate. February 1977. Price

us: Suggestions for Child Health Pro-
pub. no. (HSM) 73-5603.

Project Directors and Health Person-
1 pp. 1971. Price \$0.75. DHEW pub.

S. Lin-Fu, M.D. 24 pp. 1971. Price

Insurance Company, Health and Wel-
fare, New York, NY 10010. This company pro-
vides materials to individuals and groups for free.
They have ordered twenty or more copies of var-
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be one of these booklets follows.

recommended for all center staff. A
booklet for working with children—teachers, admin-
istrative personnel. Photographs illustrate
problems often seen among school
children as health observer and the impor-
tance of health among home, school, and com-

diverse. Write and request catalogs and
be free to child care organizations
have none, simply explain your pro-
gram and parents.

United Children and Adults, 2023 West
Washington Avenue, Chicago, IL 60611. They
have a catalog of materials on safety and acci-

Chicago Ave., Chicago, IL 60611.
Materials for young children, par-

Woodwin and Geraldine Pollen, 1972.
"S" Street, N.W., Washington, DC
(Publications too.) This resource-and-

activity book for parents and teachers of young children is full of interesting
activities, games, recipes, and facts.

*Kids Are Natural Cooks: Child-tested Recipes for Home and School Using Natural
Foods*, by Parents' Nursery School. 1975. Houghton Mifflin Company, 110 Tre-
mont Street, Boston, MA 02107. \$3.95. This is mainly a recipe book, but it also
tells how to involve young children in food preparation.

The Mother-Child Cookbook: An Introduction to Educational Cooking. 1970. Pacific
Coast Publishers, Menlo Park, CA 94025. \$4.50. This book explains how to in-
volve children ages 2 to 5 in food preparation and what they gain from the ex-
perience. It also contains recipes that must be modified to eliminate sugar, food
additives, and highly processed foods.

Cooking and Eating with Children. 1976. Association for Childhood Education Inter-
national, 3615 Wisconsin Ave., N.W., Washington, DC 20016. \$2.50. This gives
more ideas of food-related activities to do with youngsters at school or at home.

Guidebooks and Cookbooks for Parents and Teachers

The Supermarket Handbook. By Nikki Goldbeck and David Goldbeck. 1976. 400 pp.
Signet, The New American Library, Inc., 1301 Avenue of the Americas, New
York, NY 10019. \$1.95. This extremely useful book is (to quote from the book)
"designed to guide you past the non-nutritive, chemically-laden non-foods in the
supermarket to the whole, healthy items."

Better Food for Public Places: A Guide for Improving Institutional Food. By Anne
Moyer. 1977. Rodale Press, Emmaus, PA 18049. \$4.95. Excellent guide for all
institutions—daycare centers, schools, colleges, hospitals, and restaurants—that
serve food to groups of people. It tells practical, economical ways to use all-
natural rather than processed foods.

The Good Goodies, Recipes for Natural Snacks and Sweets. By Stan Dworkin and
Floss Dworkin. 1974. Rodale Press, Emmaus, PA 18049. \$4.95. This is full of
delicious recipes that use whole grains and substitute honey, fruits, and other
natural sweeteners for sugar.

The Natural Foods Sweet Tooth Cookbook. By Eunice Farmilant. 1973. Pyramid
Communications, Inc., 919 Third Avenue, New York, NY 10022. \$1.50.